Characterization of superoxide dismutase (SOD) activity and neuroprotection against NMDA excitotoxicity for the e,e,e series of C60 malonic acid and acetic acid derivatives

Explanation of terms:

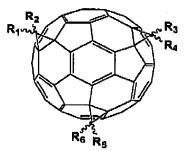
"Hexa" = C_3 (C_{60} (C(COOH)₂)₃ where the maionic acid groups are all at the e,e,e positions (1)

"Penta's" = $(C_{50}(C(COOH)_2)_2(C(CHCOOH)))$ where the groups are at the e,e,e positions. There are two stereoisomers (2)

"Tetra's" = $(C_{60}(C(COOH)_2)(C(CHCOOH))_2$ where all groups are in the e,e,e positions. There are four steroisomers (3)

" C_3 -lite" = $(C_{60}(C(CHCOOH))_3$ where all groups are in the e,e,e positions. There are 4 isomers.

- 1. $R_1 = R_2 = R_3 = R_4 = R_5 = R_8 = COOH(C_3)$
- 2. $R_1 = H_1 R_2 = R_3 = R_4 = R_5 = R_8 = COOH^{\frac{1}{2}}$ (Penta Pair)
- 3. $R_1=R_3=H$, $R_2=R_4=R_5=R_6=COOH$ (Tetra Quartet)
- 4. $R_1 = R_3 = R_5 = H$, $R_2 = R_4 = R_8 = COOH$ (C_3 -lite)
- 5. R₁=R₂=COOBu,
- $R_3 = R_4 = R_5 = R_6 = COOMe$ 6. $R_1 = R_2 = R_3 = R_4 = COOBu$,
- 6. $R_1 = R_2 = R_3 = R_4 = COOBu$, $R_5 = R_6 = COOMe$
- 7. $R_1 = R_2 = COOH$, $R_3 = R_4 = R_5 = R_6 = COOMe$
- 8. $R_1 = R_2 = R_3 = R_4 = COOH$, $R_5 = R_6 = COOMe$
- 9. R₁=H, R₂=COOH,
 - R₃=R₄=Rᢆ₅=R₅=COOMe
- 10. $R_1=R_3=H$, $R_2=R_4=COOH$, $R_6=R_6=COOMe$



EXHIBIT